IENT BOOK

Dimensions			Contents	Reference to last Measurem
ngth 4	Breadth 5	Depth 6	7	8
IT - 4817 -				
VAT - 19269 -				
SD - 24086 -				
Cur - 4817 -				
CBF - 1182 -				
53471 -				

SBRNO: AEE/KSD/SBR/245/16-17

M. A. R. 57 (Rule 116)
Measurement Book

No: B 183843

BR-747/2212-16

Dt: 26.12.16

rial No. Post and final bill:

me of work Improvements to roads From and drains near To Gangamma temple area

me of Contractor of nature of Agency Amruthahalli BP Ward No. 07, Kodigehalli subdivision

te of commencement of work Sri. Ninganagowda V. Patil: Date:

ate	Full description, etc, of work 2	Number 3	Dimensions: Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Est. cost:-	40.00 lakhs					
	Job code	007-16-600002.					
	Head of Account:	P3089					
	A.S. No:-	BBMP/JC/YNK/PR/16/15-16: date: 20-08-15.					
	TS No:-	BBMP/CE/YNK/PR/28/15-16; date: 21-08-15.					
	Agr. No:-	NO.EE/BTP/BBMP/E-PMT/Agr/2/15-16; dt: 26-2-16					
	Work order No:-	NO.EE/BTP/BBMP/E-PMT/253/15-16; dt: 26-02-16.					
	Tender price:-	38,70968.00					
	Date of completion.	26-12-16					
	Date of recording:-	26-12-16					

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurem
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item No-01:-						
	Removing RS slab of drain and stacking:						
	Qty vide page No: 183878 →		465.30				
	At the rate of Rs: 58.00 →					26987.40	
	Item No-02:-						
	Refixing stone slabs of drains and pointing in CM 1:3:						
	Qty vide page No: 183879 →		372.24				
	At the rate of Rs: 75.00 →					27918.00	
	Item No-05:-						
	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto						

rial No. .....
me of work .....
me of Contractor of nature of Agency.....
te of commencement of work.....

ate	Full description, etc, of work
	2
	units after breaking
	Qty vide page No
	At the rate of Rs
	Item No.17:-
	loading and
	Qty vide pa
	At the rate

EMENT BOOK

Dimensions			Contents	Referen to last Measurer
Length 4	Breadth 5	Depth 6	7	8
n and stacking:				
878 →	465.30 Sqm.			
0 →				26987.40
of drains and pointing in CM 1:3:				
79 →	372.24 Sqm.			
.00 →				27918.00
on by manual means in				
n average horizontal throw upto				

M. A. R. 57 (Rule 116)
Measurement Book

No. B 183844

al No. .....
e of work ..... From ..... To .....
e of Contractor of nature of Agency.....
e of commencement of work.....

te	Full description, etc, of work 2	Number 3	Dimensions Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Units after breaking of clods complete as per specifications:						
	Qty vide page No: 183880 →		275.82 cum.				
	At the rate of Rs: 75.00 →						20686.00
	Item No. 17:-						
	loading and unloading charges:						
	Qty vide page No. 183880 →		275.82 cum				
	At the rate of Rs: 72.00 →						19859.04

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Item No-04:-						
	Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material within all lifts and leads upto 1000m complete as specifications.						
	Qty vide page No. 183881 →					2916.00 sqm.	
	At the rate of Rs: 18.00 →					52488.00	
	Item No-05:-						
	compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling to depression occuring during rolling including cost of all labour, TOM of machinery;						

Material No. .....
Name of work .....
Name of Contractor of nature of Agency.....
Date of commencement of work.....

Date	Full description, etc, of work	
	2	
	Qty vide page N	
	At the rate of	
	Item No-06:-	
	Providing and	
	M10 with OPC cement @	
	granit metal coarse	
	0.465 cum machine	
	Qty vide pag	
	At the rate	

Dimensions			Contents	Reference to last Measurement
ngth	Breadth	Depth		
4	5	6	7	8
ng granular road surface				
posal of scarified material				
000m complete as specifications.				
→			2916.00 sqm	
→				52488.00
ground with maximum				
es roller including filling in				
olling including cost of all				

M. A. R. 57 (Rule 116)
Measurement Book

No. B 183845

al No. .....
ne of work ..... From ..... To .....
ne of Contractor of nature of Agency.....
e of commencement of work.....

te	Full description, etc, of work	Number	Dimensions Length	Breadth	Depth	Contents	Reference to last Measurement
	2	3	4	5	6	7	8
	Qty vide page No:	183883 →			2916.00		
	At the rate of Rs: 4.00 →						11664.00
	Item No-06:-						
	Providing and laying in position plain cement concrete of mix						
	M10 with OPC cement @ 270 kgs with 40mm and down size graded						
	granit metal coarse aggregates @ 0.892 cum and fine aggregates						
	@ 0.465 cum machine mixed including cost of all material.						
	Qty vide page No.	183885 →			172.76 cum.		
	At the rate of Rs:	5000.00 →					863800.00

MENT BOOK

Dimensions			Contents	Reference to last Measurement
ength 4	Breadth 5	Depth 6	7	8
→	339.20 cum.			485056.0
→				
forcement for RCC work, including nding, hooking, placing in ps, hooks and wastage shall cost of materials, labour,				
3889	→ 5.6 tonne.			
2.00 →	~~78002.00~~ →			436811.20

M. A. R. 57 (Rule 116)
Measurement Book

No. B 183847

al No. .....
e of work ..... From ..... To .....
e of Contractor of nature of Agency.....
e of commencement of work.....

e	Full description, etc, of work 2	Number 3	Dimensions Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Item No.09.- Providing and laying cement concrete using 20mm and down size granite jelly of ready mix concrete for RCC works laid in 15cm thick layers and well compacted including vibrating curing etc, including smooth finish in CM 1:3, with all lead and lift:						
	Drains bottom:-						
	Gangamma templered	01	30.00	0.6	0.10	= 1.80	
		01	30.00	0.6	0.10	= 1.80	
		01	30.00	0.6	0.10	= 1.80	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
		01	30.00	0.60	0.10	= 1.80	
		01	30.00	0.60	0.10	= 1.80	
		01	30.00	0.60	0.10	= 1.80	
		01	10.00	0.60	0.10	= 0.60	
						11.40 cum.	
	Main road [LHS & RTR]	01	30.00	0.60	0.10	= 1.80	
		01	30.00	0.60	0.10	= 1.80	
		01	22.60	0.60	0.10	= 1.35	
	cross road [	01	30.00	0.60	0.10	= 1.80	
		01	13.5	0.60	0.10	= 0.81	
	cds	03	5.00	0.60	0.10	= 0.9	
						8.466 cum.	

rial No. .....
me of work .....
me of Contractor of nature of Agency.....
te of commencement of work.....

ate	Full description, etc, of work
	2
	Sidewalls:-
	Ganganma temple road:
	road [left & RTR]

C/F.S
29/12
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತ

EMENT BOOK

Dimensions			Contents	Reference to last Measurement
Length 4	Breadth 5	Depth 6	7	8
30·00	0·60	0·10 =	1·80	
30·00	0·60	0·10 =	1·80	
30·00	0·60	0·10 =	1·80	
10·00	0·60	0·10 =	0·60	
			11·40 cum.	
30·00	0·60	0·10 =	1·80	
30·00	0·60	0·10 =	1·80	
22·60	0·60	0·10 =	1·35	
30·00	0·60	0·10 =	1·80	
13·5	0·60	010 =	0·81	
5·00	0·60	0·16 =	0·9	
			8·466 cum.	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 183848

...al No. .....
...me of work ..... From ..... To .....
...me of Contractor of nature of Agency.....
...e of commencement of work.....

Date	Full description, etc, of work 2	Number 3	Dimensions Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Sidewalls:-	02	30·00	0·60	0·10 =	3·60	
	Gangamma temple road:	02	30·00	0·60	0·10 =	3·60	
		02	30·00	0·60	0·10 =	3·60	
		04	30·00	0·60	0·10 =	7·20	
		04	30·00	0·60	0·10 =	7·20	
	C/F.S	04	30·00	0·60	0·10 =	7·20	
	29/12	~~02~~	~~30·00~~	~~0·60~~	~~0·10~~	~~3·60~~	NDP AE(W)
	ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರವರು	04	10·00	0·60	0·10 =	2·40	
	road [left of GTR]	04	30·00	0·60	0·10 =	7·20	
		04	30·00	0·60	0·10 =	7·20	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
		04	22.60	0.60	0.10	= 5.42	
		04	30.00	0.60	0.16	= 7.20	
		04	13.50	0.60	0.10	= 3.24	
						65.06 cum	
	Roads:-						
	Gangamma temple road	01	15.00	6.50	0.10	= 9.75	
		01	15.00	5.90	0.10	= 8.85	
		01	15.00	5.90	0.10	= 8.85	
		01	15.00	5.30	0.10	= 7.95	
		01	15.00	6.00	0.10	= 9.00	
		01	7.60	6.00	0.10	= 4.56	
						48.96 cum	

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು

erial No. .....
ame of work .....
ame of Contractor of nature of Agency.....
ate of commencement of work.....

Date	Full description, etc, of work
1	2
	Maind [Hist of GTR]
	Road connecting Amruthahalli colony rd

ಕಾರ್ಯಪಾಲಕ

06

UREMENT BOOK

Number 3	Dimensions: Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
04	22.60	0.60	0.10 =	5.42	
4	30.00	0.60	0.16 =	7.20	
04	13.50	0.60	0.10 =	3.24	
	ಅಭಿಯಂತರರು			65.06 cum	
01	15.00	6.50	0.10 =	9.75	
01	15.00	5.90	0.10 =	8.85	
01	15.00	5.90	0.10 =	8.85	
01	15.00	5.30	0.10 =	7.95	
01	15.00	6.00	0.10 =	9.00	
ರರು	7.60	6.60	0.10 =	4.56	
				48.96 cum	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 183849

...l No. ..... From ..... To .....

...e of work .....

...e of Contractor of nature of Agency.....

... of commencement of work.....

Number 3	Dimensions: Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Maint [Hsg GTR]					
01	15.00	5.50	0.10 =	8.25	
01	15.00	6.00	0.10 =	9.00	
01	13.50	6.00	0.10 =	8.10	
				25.35 cum	
	ಅಭಿಯಂತರರು				
Road connecting ... Amruthahalli colony rd:					
01	20.00	5.00	0.10 =	10.00	
01	20.00	7.00	0.10 =	14.00	
01	7.00	4.50	0.10 =	3.15	
01	6.30	4.70	0.10 =	2.96	
01	5.00	4.50	0.10 =	2.25	
				32.36 cum	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	culverts covering slab	03	5.00	1.80	0.20 =	5.40	
						197.00 cum	
	Qty Hd to.	193.06 cum.					
	At the rate of Rs:	5840.00 →					11 27470.40
Item No.10:-							
	Vacuum dewatering with vacuum pump and suction mat and compaction with skin floater clubbed, vibratory, power floater, blade and disc etc, with all lead and lift:						
	Gangamma temple road:	01	15.00	6.50	- =	97.50	
		01	15.00	5.90	- =	88.50	

rial No. .....
me of work .....
me of Contractor of nature of Agency.....
te of commencement of work.....

ate	Full description, etc, of work	
	2	
	main road [LHS of GTR]	
	Road connecting to Amrit-halli colony road:	

MENT BOOK

Dimensions			Contents	Reference to last Measurement
Length 4	Breadth 5	Depth 6	7	8
15.00	6.50	-	= 97.50	
18.50	7.30	-	= 135.05	
15.00	6.50	-	= 97.50	
15.00	6.80	-	= 102.00	
15.00	6.50	-	= 97.50	
15.00	6.80	-	= 102.00	
15.00	6.50	-	= 97.50	
15.00	6.80	-	= 102.00	
15.00	6.30	-	= 94.50	
15.00	6.50	-	= 97.50	
15.00	6.50	-	= 97.50	
15.00	5.00	-	= 75.00	
12.00	6.00	-	= 72.00	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 183852

ial No. ..... From ..... To .....
me of work .....
me of Contractor of nature of Agency.....
e of commencement of work.....

ate	Full description, etc, of work 2	Number 3	Dimensions Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
		01 -	30.00	5.00	-	= 150.00	
		01 -	30.00	5.00	-	= 150.00	
		01 -	27.80	5.00	-	= 139.00	
						1696.05 sqm.	
							54273.60
	At the rate of Rs: 32.00 →						
	Item No.15:-						
	Providing and laying semi-dense bituminous concrete 25mm to 30mm thick with 100-120TPH batch type HMP producing an average						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	output of 75 tonnes per hour using, premixed with bituminous binder at 4.5 to 5% of mix and filler, hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and tandem rollers to achieve the desired compaction as per MORTH specifications						
	Gangamma temple road:	01	15.00	6.10	0.03	= 2.75	
		01	15.00	6.50	0.03	= 2.93	
		01	15.00	6.50	0.03	= 2.93	
		01	18.50	7.30	0.03	= 4.05	
		01	15.00	6.50	0.03	= 2.93	
		01	15.00	6.80	0.03	= 3.06	
		01	15.00	6.50	0.03	= 2.93	

Serial No. .....
Name of work .....
Name of Contractor of nature of Agenc
Date of commencement of work.....

Date	Full description, etc, of work
	2

URE MENT BOOK

Dimensions				Contents	Reference to last Measure
mber 3	Length 4	Breadth 5	Depth 6	7	8
hour using, premixed with bituminous					
x and filler, hot mix to work site,					
lic paver finisher with sensor					
grade, level and tandem rollers					
compaction as per MORTH specification					
01	15.00	6.10	0.03	= 2.75	
01	15.00	6.50	0.03	= 2.93	
01	15.00	6.50	0.03	= 2.93	
1	18.50	7.30	0.03	= 4.05	
1	15.00	6.50	0.03	= 2.93	
1	15.00	6.80	0.02	= 3.06	
1	15.00	6.50	0.03	= 2.93	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 183853

al No. .....

e of work ..... From ..... To .....

e of Contractor of nature of Agency.....

e of commencement of work.....

	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
		01	15.00	6.80	0.03	= 3.06	
		01	15.00	6.30	0.03	= 2.84	
		01	15.00	6.50	0.03	= 2.93	
		01	15.00	6.50	0.03	= 2.93	
		01	12.00	5.00	0.03	= 2.25	
		01	12.00	6.00	0.03	= 2.16	
		01	30.00	5.00	0.03	= 4.50	
		01	30.00	5.00	0.03	= 4.50	
		01	27.80	5.00	0.03	= 4.17	
						50.88	cum

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measureme
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	At the rate of Rs: 8475.00 →						43208.00
	Item No 016:-						
	Road marking with hot applied thermoplastic compocund with reflectorising glass beads on bituminous surface:	02	265.5	0.10	-	= 53.00 sqm	
	At the rate of Rs: 474.00 →						25122.00
	GRAND TOTAL=						3913233.64

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕೋಣೇಪಹಳ್ಳಿ ಉಪವಿಭಾಗ
ಯಲಹಂಕ ವಲಯ, ಬಿ.ಬಿ.ಎಂ.ಪಿ
ಬೆಂಗಳೂರು - 560092

AE (W-7)
26/12/16

26/12/16

Serial No. .....
Name of work .....
Name of Contractor of nature of
Date of commencement of work

Date	Full description, etc,
1	2

INDEX
RCC Drai
Asphalt
Concrete
Culvert:

UREMENT BOOK

Dimensions				Contents	Reference to last Measurement
mber 3	Length 4	Breadth 5	Depth 6	7	8
475·00 →				431208.00	
ith hot applied thermoplastic					
sing glass beads on bituminous					
2	265·5	0·10	–	= 53.00 sqmts	
74·00 →				25122.00	
GRAND TOTAL=				3913233.64	

Asphalt N.D
AE (W7)
26/12/16

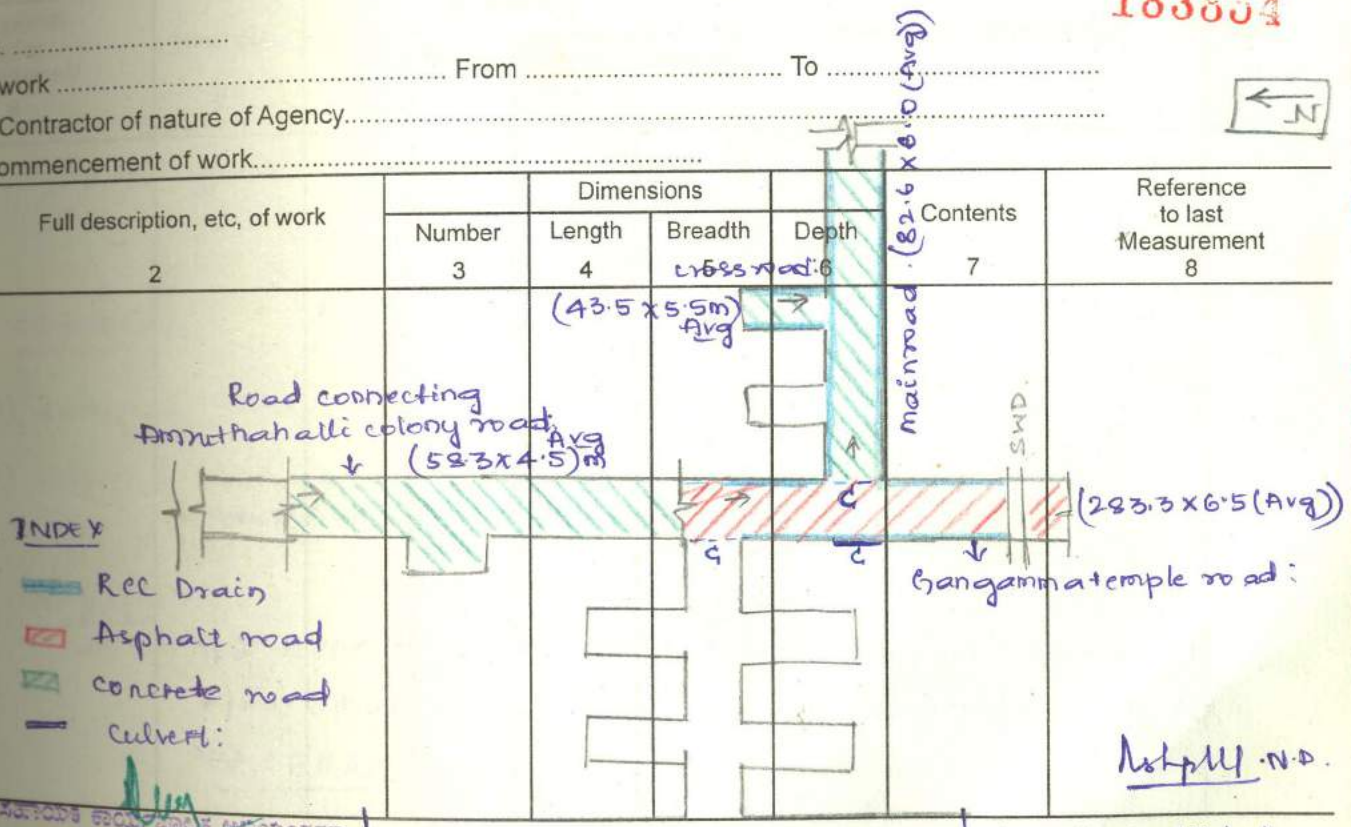
M. A. R. 57 (Rule 116)
Measurement Book

No. B

183854

al No. .....
ne of work ..... From ..... To .....
ne of Contractor of nature of Agency.....
e of commencement of work.....

te	Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
				cross road			



MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurem
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Royalty charges: -		Coarse		Fine Agr	cement.	
Sl.No.	Qty/Unit	co-eff	qty	co-eff	qty	co-eff	qty:
06	172.76 - cum PCC 1:4:8	0.96	165.84	0.48	82.92	-	-
09	193.06 cum 20mm ↓ RMC.	0.85	164.10	0.416	80.31	-	-
13	339.20 cum WMM.	-	339.20				
15	56.88 cum SDBC.	1.40	71.23				
	TOTAL=		740.37	cum	163.23	cum	
	ABSTRACT:						
	1) coarse aggregate: 740.37 x		108/cum	=	79959.96/-		
	2) fine aggregate: 163.23 x		103/cum	=	16812.69/-		
			TOTAL=		96772.65		

Serial No. .....
Name of work .....
Name of Contractor of nature of Agen
Date of commencement of work.....

Date	Full description, etc, of work
1	2
	CERTIFICATE:-
	1) certified that
	2) certified that
	Authority
	AE(WT)

REMENT BOOK

Dimensions				Contents	Reference to last Measurement
per	Length 4	Breadth 5	Depth 6	7	8
	Coarse	fine	Agr	cement:	
f	qty	co-eff	qty	co-eff	qty:
	165.84	0.48	82.92	-	-
5	164.10	0.416	80.31	-	-
	329.20				
	71.23				
	740.37	cum	163.23	cum	
	108/cum	=	79959.96/-		
	103/cum	=	16812.69/-		
	TOTAL=		96772.65		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 183855

...al No. .....
...me of work ..... From ..... To .....
...me of Contractor of nature of Agency.....
...e of commencement of work.....

Date	Full description, etc, of work 2	Number 3	Dimensions Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	CERTIFICATE:-						
	1) Certified that the work done by the contractor is satisfactory.						
	2) Certified that debris has been removed from the work spot.						
	ASST ENGINEER (WT)						
	ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಕೊಡಿಗೆ, ಪಶ್ಚಿಮ ಉಪವಿಭಾಗ ಯಲಹಂಕ ಪಲಯ, ಬಿ.ಬಿ.ಎಂ.ಪ ಬೆಂಗಳೂರು - 560092						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	ಬಿಲ್ಲು ಮೊಬಲಗು ರೂ. 39,13,233-೦೦ ಗಳಿಸಿದ್ದು ಮಾಡಿದ್ದು ಮಾಡಿದ್ದು : ಇಪ್ಪತ್ತೆ ರೂ. 340729-೦೦ ಹೊಂದಾಣಿಕೆ ಮಾಡಿಕೊಂಡು ಉಳಿದ ಮೊಬಲಗು 35,72,504-೦೦ ರೂ. Rs Thirty Five Lakhs Seventy two Thousand five hundred four only.) ಚೆಕ್ ಮುಖಾಂತರ ನೀಡಲಾಗಿದೆ ಲೆಕ್ಕಾಧೀಕ್ಷಕರು					Total Rs: 39,13,233-೦೦ GT- 39182-೦೦ VAT- 156529-೦೦ CLL- 39132-೦೦ CBF- 3913-೦೦ Fire- 5250-೦೦ LR- 96773-೦೦ Adv 340729-೦೦ Chq: 35,72,504-೦೦	

Serial No. 1st and final bill
Name of work Improvements to
Name of Contractor of nature of Agenc
Date of commencement of work...

Date	Full description, etc, of work
1	2
	Est. Cost: Job code: Head of Account: A.S. No:- T.S. No- Agr. No:- Approved tender price: Date of completion: Date of recording: